

**Web Table 1.** Adjusted\* odds ratios (95% confidence interval) for risk of high coronary calcification (CAC) and common carotid artery intima media thickness (IMT) (>90<sup>th</sup> percentile, respectively) at year 20 according to categories of BMI at year 0, year 10, and year 20 of the CARDIA Study

Outcome:		Categories of BMI measured at specific year (kg/m <sup>2</sup> )					P <sub>trend</sub>	P <sub>quadratic</sub>
		<22	22-<25	25-<30	30-<35	≥35		
<b>CAC at year 20</b>								
>0 (cases=413)	BMI at year 0	Ref	1.3 (0.9-1.8)	1.6 (1.1-2.2)	1.6 (1.0-2.7)	1.7 (0.8-3.6)	<0.01	0.36
	BMI at year 10	Ref	0.6 (0.4-0.8)	0.9 (0.6-1.2)	1.0 (0.7-1.6)	1.0 (0.6-1.7)	0.30	0.09
	BMI at year 20	Ref	0.8 (0.5-1.2)	0.7 (0.5-1.1)	1.0 (0.6-1.7)	1.5 (0.9-2.5)	<0.01	<0.01
>10 (cases=290)	BMI at year 0	Ref	1.1 (0.7-1.6)	1.7 (1.1-2.5)	1.5 (0.8-2.7)	1.9 (0.8-4.3)	0.01	0.72
	BMI at year 10	Ref	0.5 (0.3-0.7)	0.7 (0.5-1.1)	0.9 (0.5-1.5)	0.7 (0.4-1.4)	0.92	0.13
	BMI at year 20	Ref	0.6 (0.3-1.0)	0.5 (0.3-0.9)	0.7 (0.4-1.2)	0.9 (0.5-1.6)	0.55	<0.01
>20 (cases=223)	BMI at year 0	Ref	0.9 (0.6-1.4)	1.7 (1.1-2.5)	1.3 (0.7-2.4)	2.1 (0.9-5.0)	0.02	1.00
	BMI at year 10	Ref	0.4 (0.2-0.7)	0.7 (0.4-1.1)	0.8 (0.5-1.4)	0.6 (0.3-1.3)	0.81	0.18
	BMI at year 20	Ref	0.5 (0.3-1.0)	0.5 (0.3-0.9)	0.7 (0.4-1.2)	0.8 (0.4-1.4)	0.99	0.02
>40 (cases=172)	BMI at year 0	Ref	0.8 (0.5-1.2)	1.4 (0.9-2.2)	0.8 (0.4-1.7)	1.5 (0.5-4.0)	0.34	0.95
	BMI at year 10	Ref	0.5(0.3-0.8)	0.7 (0.4-1.1)	0.7 (0.3-1.2)	0.8 (0.3-1.3)	0.44	0.26
	BMI at year 20	Ref	0.7 (0.3-1.3)	0.6 (0.3-1.0)	0.7 (0.3-1.3)	0.6 (0.3-1.3)	0.33	0.19
<b>IMT at year 20</b>								
>70 <sup>th</sup> (cases=674)	BMI at year 0	Ref	1.3 (1.0-1.7)	2.0 (1.5-2.6)	2.7 (1.7-4.1)	1.8 (1.0-3.3)	<0.01	0.13
	BMI at year 10	Ref	1.1 (0.8-1.6)	1.6 (1.2-2.2)	2.2 (1.5-3.3)	2.4 (1.6-3.7)	<0.01	0.84
	BMI at year 20	Ref	1.2 (0.7-1.9)	1.4 (0.9-2.2)	2.2 (1.4-3.7)	3.0 (1.8-4.9)	<0.01	0.29
>80 <sup>th</sup> (cases=449)	BMI at year 0	Ref	1.4 (1.0-2.0)	2.4 (1.7-3.3)	3.2 (2.0-5.1)	2.5 (1.3-4.8)	<0.01	0.07
	BMI at year 10	Ref	1.1 (0.7-1.7)	1.7 (1.2-2.5)	2.1 (1.3-3.2)	3.1 (1.9-5.1)	<0.01	0.66
	BMI at year 20	Ref	1.1 (0.6-2.0)	1.3 (0.8-2.4)	2.1 (1.1-3.7)	3.5 (1.9-6.5)	<0.01	0.06
>90 <sup>th</sup> (cases=225)	BMI at year 0	Ref	2.0 (1.3-3.2)	2.8 (1.8-4.5)	3.8 (2.1-7.0)	2.3 (0.9-5.4)	<0.01	<0.01
	BMI at year 10	Ref	0.9 (0.5-1.6)	1.3 (0.8-2.1)	1.6 (0.9-2.9)	2.1 (1.1-4.0)	<0.01	0.45
	BMI at year 20	Ref	1.6 (0.6-4.3)	1.9 (0.7-4.8)	3.4 (1.3-8.8)	4.8 (1.9-12.4)	<0.01	0.71

\*Adjusting for age, sex, race, study center, cigarette smoking, physical activity, systolic blood pressure, HDL cholesterol, LDL cholesterol, triglycerides, and fasting glucose.

Each covariate was measured at the same examination as the corresponding BMI. Shaded values were given in the main text.

**Web Table 2.** Adjusted\* odds ratios (95% confidence interval) for risk of high coronary calcification (CAC) at year 20 according to 3 indices of year 20 BMI and its history (BMI at year 0, slope of BMI from year 0 to year 20, and fluctuations in BMI during 20 years) in the CARDIA Study

Agatston score	Quintile of year 0 BMI (kg/m <sup>2</sup> , median)					P <sub>trend</sub>
	Q1(19.8)	Q2(21.6)	Q3(23.4)	Q4(25.3)	Q5(29.7)	
>0 (cases=413)	Ref	1.0 (0.7-1.6)	1.4 (0.9-2.1)	1.7 (1.1-2.6)	2.0 (1.3-3.1)	<0.01
>10 (cases=290)	Ref	0.9 (0.6-1.6)	1.2 (0.7-1.9)	1.5 (0.9-2.4)	1.7 (1.0-2.9)	<0.01
>20 (cases=223)	Ref	0.8 (0.4-1.4)	1.1 (0.7-1.9)	1.3 (0.8-2.1)	1.6 (0.9-2.8)	0.02
>40 (cases=172)	Ref	0.7 (0.3-1.3)	0.9 (0.5-1.6)	1.1 (0.6-2.0)	1.3 (0.7-2.4)	0.13
Agatston score	Quintile of linear slope of BMI from year 0 to year 20 (kg/m <sup>2</sup> /yr, median)					P <sub>trend</sub>
	Q1(0.01)	Q2(0.12)	Q3(0.21)	Q4(0.32)	Q5(0.54)	
>0 (cases=413)	Ref	0.7 (0.5-1.0)	0.5 (0.4-0.8)	0.8 (0.5-1.1)	0.6 (0.4-1.0)	0.09
>10 (cases=290)	Ref	0.7 (0.5-1.1)	0.4 (0.3-0.8)	0.5 (0.3-0.8)	0.5 (0.3-0.8)	<0.01
>20 (cases=223)	Ref	0.7 (0.4-1.0)	0.4 (0.2-0.6)	0.5 (0.3-0.8)	0.4 (0.2-0.7)	<0.01
>40 (cases=172)	Ref	0.6 (0.4-1.0)	0.3 (0.2-0.6)	0.3(0.2-0.6)	0.3 (0.2-0.6)	<0.01
Agatston score	Quintile of fluctuations in BMI during 20 years (kg/m <sup>2</sup> , median)					P <sub>trend</sub>
	Q1(0.49)	Q2(0.77)	Q3(1.05)	Q4(1.46)	Q5(2.34)	
>0 (cases=413)	Ref	1.2 (0.8-1.8)	1.0 (0.7-1.5)	1.5 (1.0-2.2)	1.5 (0.9-2.2)	0.04
>10 (cases=290)	Ref	1.2 (0.8-1.9)	1.2 (0.8-2.0)	2.0 (1.3-3.2)	1.7 (1.0-2.8)	<0.01
>20 (cases=223)	Ref	1.2 (0.7-1.9)	1.1 (0.7-1.9)	1.9 (1.2-3.2)	1.8 (1.0-3.1)	<0.01
>40 (cases=172)	Ref	0.9 (0.5-1.6)	1.1 (0.7-2.0)	2.1 (1.2-3.6)	1.8 (1.0-3.3)	<0.01

\* This table presents the results from 4 separate models with different cutoff points of high CAC.

Adjusted for age, sex, race, study center, cigarette smoking, physical activity, systolic blood pressure, HDL cholesterol, LDL cholesterol, triglycerides, and fasting glucose. Shaded values were given in the main text.

**Web Table 3.** Adjusted\* odds ratios (95% confidence interval) for risk of high common carotid artery intima media thickness (IMT) at year 20 according to 3 indices of year 20 BMI and its history (BMI at year 0, slope of BMI from year 0 to year 20, and fluctuations in BMI during 20 years in the CARDIA Study

IMT	Quintile of year 0 BMI (kg/m <sup>2</sup> , median)					P <sub>trend</sub>
	Q1(19.8)	Q2(21.6)	Q3(23.4)	Q4(25.3)	Q5(29.7)	
>70 <sup>th</sup> (cases=674)	Ref	1.8 (1.2-2.6)	1.6 (1.1-2.3)	2.0 (1.4-2.9)	3.2 (2.2-4.6)	<0.01
>80 <sup>th</sup> (cases=449)	Ref	2.3 (1.4-3.6)	2.1 (1.3-3.3)	2.7 (1.7-4.3)	4.4 (2.8-6.9)	<0.01
>90 <sup>th</sup> (cases=225)	Ref	1.2 (0.6-2.4)	2.0 (1.0-3.7)	2.6 (1.4-4.9)	3.6 (2.0-6.8)	<0.01
IMT	Quintile of linear slope of BMI from year 0 to year 20 (kg/m <sup>2</sup> /yr, median)					P <sub>trend</sub>
	Q1(0.01)	Q2(0.12)	Q3(0.21)	Q4(0.32)	Q5(0.54)	
>70 <sup>th</sup> (cases=674)	Ref	0.9 (0.7-1.3)	1.3 (0.9-1.8)	1.2 (0.8-1.7)	1.4 (1.0-2.0)	0.01
>80 <sup>th</sup> (cases=449)	Ref	0.8 (0.5-1.2)	1.3 (0.8-1.9)	1.4 (0.9-2.1)	1.6 (1.0-2.4)	<0.01
>90 <sup>th</sup> (cases=225)	Ref	0.7 (0.4-1.2)	1.4 (0.8-2.3)	1.6 (0.9-2.6)	1.8 (1.0-3.0)	<0.01
IMT	Quintile of fluctuations in BMI during 20 years (kg/m <sup>2</sup> , median)					P <sub>trend</sub>
	Q1(0.49)	Q2(0.77)	Q3(1.05)	Q4(1.46)	Q5(2.34)	
>70 <sup>th</sup> (cases=674)	Ref	1.2 (0.9-1.7)	1.2 (0.9-1.7)	1.4 (1.0-1.9)	1.5 (1.0-2.1)	0.03
>80 <sup>th</sup> (cases=449)	Ref	1.3 (0.9-2.0)	1.3 (0.9-2.0)	1.5 (1.0-2.2)	1.5 (1.0-2.4)	0.04
>90 <sup>th</sup> (cases=225)	Ref	0.9 (0.5-1.6)	1.0 (0.6-1.6)	0.9 (0.5-1.5)	1.2 (0.7-2.1)	0.55

\* This table presents the results from 4 separate models with different cutoff points of high IMT.

Adjusted for age, sex, race, study center, cigarette smoking, physical activity, systolic blood pressure, HDL cholesterol, LDL cholesterol, triglycerides, and fasting glucose. Shaded values were given in the main text.

**Web Table 4.** Adjusted\* odds ratios (95% confidence interval) for progression of coronary calcification (CAC) with 3 indices of year 15 BMI and its history (BMI at year 0, slope of BMI from year 0 to year 15, and fluctuations in BMI during 15 years) in the CARDIA Study

Agatston score increase from year 15 to 20	Quintile of year 0 BMI (kg/m <sup>2</sup> , median)					P <sub>trend</sub>
	Q1(19.8)	Q2(21.6)	Q3(23.4)	Q4(25.3)	Q5(29.7)	
>0 (cases=407)	Ref.	1.1 (0.7-1.7)	1.3 (0.9-2.1)	1.7 (1.1-2.5)	1.9 (1.3-3.0)	0.01
>10 (cases=277)	Ref.	0.9 (0.6-1.6)	1.2 (0.7-2.0)	1.3 (0.8-2.2)	1.8 (1.0-3.0)	0.01
>20 (cases=207)	Ref.	0.8 (0.4-1.5)	0.9 (0.5-1.7)	1.2 (0.7-2.0)	1.5 (0.8-2.6)	0.08
>40 (cases=137)	Ref.	0.6 (0.3-1.2)	0.8 (0.4-1.6)	0.7 (0.4-1.5)	1.4 (0.7-2.7)	0.17
	Quintile of linear slope of BMI from year 0 to year 15 (kg/m <sup>2</sup> /yr, median)					
	Q1(-0.01)	Q2(0.12)	Q3(0.22)	Q4(0.36)	Q5(0.61)	P <sub>trend</sub>
>0 (cases=407)	Ref.	1.0 (0.7-1.4)	0.8 (0.5-1.1)	1.0 (0.7-1.4)	0.7 (0.5-1.1)	0.15
>10 (cases=277)	Ref.	0.9 (0.6-1.4)	0.6 (0.4-0.9)	0.7 (0.4-1.0)	0.5 (0.3-0.8)	<0.01
>20 (cases=207)	Ref.	0.9 (0.6-1.4)	0.6 (0.4-1.0)	0.6 (0.3-0.9)	0.4 (0.2-0.6)	<0.01
>40 (cases=137)	Ref.	0.8 (0.5-1.4)	0.6 (0.3-1.0)	0.4 (0.2-0.8)	0.3 (0.1-0.6)	<0.01
	Quintile of fluctuations in BMI during 15 years (kg/m <sup>2</sup> , median)					
	Q1(0.40)	Q2(0.69)	Q3(0.96)	Q4(1.35)	Q5(2.17)	P <sub>trend</sub>
>0 (cases=407)	Ref.	0.9 (0.6-1.3)	1.0 (0.7-1.4)	1.5 (1.0-2.2)	1.5 (0.9-2.2)	0.01
>10 (cases=277)	Ref.	0.8 (0.5-1.3)	1.1 (0.7-1.7)	1.9 (1.2-3.0)	1.5 (0.9-2.5)	<0.01
>20 (cases=207)	Ref.	1.0 (0.6-1.8)	1.4 (0.8-2.3)	1.9 (1.1-3.3)	2.0 (1.1-3.6)	<0.01
>40 (cases=137)	Ref.	0.9 (0.5-1.8)	1.4 (0.7-2.6)	2.2 (1.1-4.3)	2.1 (1.1-4.3)	<0.01

\* This table presents the results from 4 separate models with different cutoff points of progression of CAC from year 15 to year 20. Adjusted for age, sex, race, study center, cigarette smoking, physical activity, systolic blood pressure, HDL cholesterol, LDL cholesterol, triglycerides, and fasting glucose. Shaded values were given in the main text.

**Web Table 5.** Adjusted\* odds ratios (95% confidence interval) for risk of high coronary calcification (CAC) and common carotid artery intima media thickness (IMT) (each >90<sup>th</sup> percentile) at year 20 according to quintiles of waist circumference (WST) at years 0, 10, and 20 of the CARDIA Study

Outcome: CAC at year 20		Quintiles of waist circumference measured at specific year					P <sub>trend</sub>	P <sub>quadratic</sub>
		Q1	Q2	Q3	Q4	Q5		
WST at year 0	Cases/participants	29/452	31/433	38/456	51/463	74/439		
	Unadjusted %	6.4%	7.2%	8.3%	11.0%	16.9%		
	Model 1	Ref	1.0 (0.6-1.7)	1.2 (0.7-1.9)	1.4 (0.8-2.2)	2.4 (1.5-3.8)	<0.01	0.05
	Model 2	Ref	0.9 (0.5-1.5)	1.0 (0.6-1.6)	1.0 (0.6-1.6)	1.4 (0.8-2.4)	0.15	0.12
WST at year 10	Cases/participants	30/444	40/459	48/444	36/444	69/452		
	Unadjusted %	6.8%	8.7%	10.8%	8.1%	15.3%		
	Model 1	Ref	1.3 (0.8-2.1)	1.4 (0.9-2.3)	1.1 (0.7-1.9)	2.4 (1.5-3.8)	<0.01	0.23
	Model 2	Ref	1.2(0.7-2.0)	1.2 (0.7-2.0)	0.8 (0.5-1.4)	1.4 (0.8-2.4)	0.63	0.49
WST at year 20	Cases/participants	48/447	33/455	39/449	45/445	58/447		
	Unadjusted %	10.7%	7.3%	8.7%	10.1%	13.0%		
	Model 1	Ref	0.6 (0.3-0.9)	0.7 (0.5-1.2)	0.9 (0.6-1.4)	1.1 (0.7-1.7)	0.22	0.01
	Model 2	Ref	0.5 (0.3-0.9)	0.7 (0.4-1.1)	0.8 (0.5-1.3)	0.9 (0.6-1.5)	0.64	0.01
Outcome: IMT at year 20		Q1	Q2	Q3	Q4	Q5	P <sub>trend</sub>	
WST at year 0	Cases/participants	18/452	26/433	42/456	56/463	83/439		
	Unadjusted %	4.0%	6.0%	9.2%	12.1%	18.9%		
	Model 1	Ref	1.6 (0.8-2.9)	2.6 (1.5-4.8)	3.3 (1.8-5.8)	5.4 (3.1-9.3)	<0.01	0.88
	Model 2	Ref	1.5 (0.8-2.8)	2.4 (1.3-4.4)	2.8 (1.5-5.0)	4.0 (2.2-7.2)	<0.01	0.57
WST at year 10	Cases/participants	16/444	29/459	44/444	57/444	79/452		
	Unadjusted %	3.6%	6.3%	9.9%	12.8%	17.5%		
	Model 1	Ref	1.7 (0.9-3.3)	2.6 (1.4-4.8)	3.6 (2.0-6.6)	4.9 (2.8-8.8)	<0.01	0.35
	Model 2	Ref	1.6 (0.8-3.0)	2.1 (1.1-3.9)	2.5 (1.3-4.7)	2.8 (1.5-5.2)	<0.01	0.21
WST at year 20	Cases/participants	15/447	26/455	35/449	59/445	90/447		
	Unadjusted %	3.4%	5.7%	7.8%	13.3%	20.1%		
	Model 1	Ref	1.5 (0.8-3.0)	2.2 (1.2-4.2)	3.7 (2.0-6.9)	6.5 (3.6-11.6)	<0.01	0.59
	Model 2	Ref	1.3 (0.7-2.6)	1.8 (0.9-3.5)	2.9 (1.5-5.5)	4.6 (2.4-8.7)	<0.01	0.55

\*Model 1: adjusting for age, sex, race, study center, cigarette smoking, and physical activity

Model 2: further adjusting for systolic blood pressure, HDL cholesterol, LDL cholesterol, triglycerides, and fasting glucose.

Each covariate was measured at the same examination as the corresponding waist circumference.

**Web Table 6.** Adjusted\* odds ratios (95% confidence interval) for risk of high coronary calcification (CAC) (>90<sup>th</sup> percentile) at year 20 according to 3 indices of year 20 waist circumference (WST) and its history (WST at year 0, linear slope of WST from year 0 to year 20, and fluctuations in WST during 20 years) in the CARDIA Study

	Quintile of year 0 WST (cm, median)					P <sub>trend</sub>
	Q1(65)	Q2(69)	Q3(73)	Q4(80)	Q5(91)	
Cases/participants	29/452	31/433	38/456	51/463	74/439	
Unadjusted %	6.4 %	7.2 %	8.3 %	11.0 %	16.9 %	
Model 1	Ref	1.0 (0.6-1.7)	1.2 (0.7-2.0)	1.4 (0.8-2.3)	2.1 (1.3-3.5)	<0.01
Model 2	Ref	1.0 (0.6-1.7)	1.2 (0.7-2.0)	1.3 (0.8-2.3)	1.9 (1.1-3.2)	0.02
	Quintile of linear slope of WST from year 0 to year 20 (cm/year, median)					P <sub>trend</sub>
	Q1(0.12)	Q2(0.41)	Q3(0.63)	Q4(0.90)	Q5(1.32)	
Cases/participants	66/447	46/450	30/448	49/449	32/449	
Unadjusted %	14.7 %	12.7 %	7.6 %	8.9 %	5.8 %	
Model 1	Ref	0.7 (0.5-1.1)	0.5 (0.3-0.7)	0.8 (0.5-1.2)	0.5 (0.3-0.8)	<0.01
Model 2	Ref	0.7 (0.5-1.1)	0.4 (0.3-0.7)	0.7 (0.4-1.1)	0.4 (0.3-0.8)	<0.01
	Quintile of fluctuations in WST during 20 years (cm, median)					P <sub>trend</sub>
	Q1(1.49)	Q2(2.24)	Q3(2.98)	Q4(3.92)	Q5(5.81)	
Cases/participants	40/447	29/449	45/449	45/449	64/449	
Unadjusted %	9.0 %	6.5 %	10.0%	10.0 %	14.3 %	
Model 1	Ref	0.7 (0.4-1.2)	1.0 (0.6-1.6)	1.0 (0.6-1.6)	1.4 (0.9-2.3)	0.03
Model 2	Ref	0.7 (0.4-1.1)	1.0 (0.6-1.6)	1.0 (0.6-1.6)	1.4 (0.8-2.2)	0.04

\* This table presents the results from 2 separate models with different covariates. Each model had year 0 WST, slope of WST from year 0 to year 20, fluctuations in WST during year 0 to year 20, and covariates measured at year 20. Covariates for model 1 were age, sex, race, study center, cigarette smoking, and physical activity. Covariates for model 2 were covariates for model 1 plus systolic blood pressure, HDL cholesterol, LDL cholesterol, triglycerides, and fasting glucose.

**Web Table 7.** Adjusted\* odds ratios (95% confidence interval) for risk of high common carotid artery intima media thickness (IMT) (>90<sup>th</sup> percentile) at year 20 according to 3 indices of year 20 waist circumference (WST) and its history (WST at year 0, linear slope of WST from year 0 to year 20, and fluctuations in WST during 20 years) in the CARDIA Study

	Quintile of year 0 WST (cm, median)					P <sub>trend</sub>
	Q1(65)	Q2(69)	Q3(73)	Q4(80)	Q5(91)	
Cases/participants	18/452	26/433	42/456	56/463	83/439	
Unadjusted %	4.0%	6.0%	9.2%	12.1%	18.9%	
Model 1	Ref	1.3 (0.7-2.5)	2.3 (1.3-4.1)	2.8 (1.6-5.0)	4.8 (2.8-8.5)	<0.01
Model 2	Ref	1.2 (0.7-2.4)	2.2 (1.2-4.0)	2.6 (1.4-4.6)	3.6 (2.0-6.6)	<0.01
	Quintile of linear slope of WST from year 0 to year 20 (cm/year, median)					P <sub>trend</sub>
	Q1(0.12)	Q2(0.41)	Q3(0.63)	Q4(0.90)	Q5(1.32)	
Cases/participants	27/447	42/450	40/448	51/449	65/449	
Unadjusted %	6.0%	9.3%	8.9%	11.4%	14.5%	
Model 1	Ref	1.9 (1.1-3.2)	1.5 (0.9-2.6)	2.1 (1.2-3.6)	2.7 (1.6-4.6)	<0.01
Model 2	Ref	2.0 (1.2-3.6)	1.5 (0.8-2.6)	2.1 (1.2-3.6)	2.6 (1.5-4.5)	<0.01
	Quintile of fluctuations in WST during 20 years (cm, median)					P <sub>trend</sub>
	Q1(1.49)	Q2(2.24)	Q3(2.98)	Q4(3.92)	Q5(5.81)	
Cases/participants	22/447	41/449	53/449	48/449	61/449	
Unadjusted %	4.9%	9.1%	11.8%	10.7%	13.6%	
Model 1	Ref	1.6 (0.9-2.8)	1.8 (1.0-3.1)	1.5 (0.9-2.6)	1.6 (0.9-2.9)	0.19
Model 2	Ref	1.5 (0.8-2.6)	1.7 (1.0-2.9)	1.4 (0.8-2.4)	1.5 (0.8-2.6)	0.34

\* This table presents the results from 2 separate models with different covariates. Each model had year 0 WST, slope of WST from year 0 to year 20, fluctuations in WST during year 0 to year 20, and covariates measured at year 20. Covariates for model 1 were age, sex, race, study center, cigarette smoking, and physical activity. Covariates for model 2 were covariates for model 1 plus systolic blood pressure, HDL cholesterol, LDL cholesterol, triglycerides, and fasting glucose.

**Web Table 8.** Adjusted\* odds ratios (95% confidence interval) for progression of coronary calcification (CAC) with 3 indices of year 15 waist circumference (WST) and its history (WST at year 0, linear slope of WST from year 0 to year 15, and fluctuations in WST during 15 years) in the CARDIA Study\*

	Quintile of year 0 WST (cm, median)					P <sub>trend</sub>
	Q1(65)	Q2(69)	Q3(73)	Q4(80)	Q5(91)	
Cases/participants	26/452	30/433	32/456	49/463	70/439	
Unadjusted %	5.8%	6.9%	7.0%	10.6%	16.0%	
Model 1	Ref	1.1 (0.6-1.9)	1.0 (0.6-1.8)	1.4 (0.8-2.3)	2.3 (1.4-3.9)	<0.01
Model 2	Ref.	1.0 (0.6-1.7)	0.9 (0.5-1.6)	1.1 (0.7-2.0)	1.7 (1.0-3.0)	0.03
	Quintile of linear slope of WST from year 0 to year 15 (cm/year, median)					P <sub>trend</sub>
	Q1(0.06)	Q2(0.39)	Q3(0.66)	Q4(0.97)	Q5(1.50)	
Cases/participants	51/447	39/449	45/449	41/449	31/449	
Unadjusted %	11.4%	8.7%	10.0%	9.1%	6.9%	
Model 1	Ref	0.7 (0.4-1.1)	0.8 (0.5-1.3)	0.7 (0.4-1.1)	0.6 (0.3-0.9)	0.05
Model 2	Ref	0.6 (0.6-1.0)	0.7 (0.4-1.0)	0.5 (0.3-0.9)	0.4 (0.2-0.7)	<0.01
	Quintile of fluctuations in WST during 15 years (cm, median)					P <sub>trend</sub>
	Q1(1.29)	Q2(2.02)	Q3(2.75)	Q4(3.73)	Q5(5.60)	
Cases/participants	36/447	30/449	40/449	39/449	62/449	
Unadjusted %	8.1%	6.7%	8.9%	8.7%	13.8%	
Model 1	Ref	0.7 (0.4-1.2)	1.0 (0.6-1.7)	1.0 (0.6-1.6)	1.4 (0.9-2.4)	0.05
Model 2	Ref	0.7 (0.4-1.2)	1.0 (0.6-1.6)	0.9 (0.5-1.5)	1.4 (0.8-2.3)	0.08

\* This table presents the results from 2 separate models with different covariates. Each model had year 0, slope of BMI from year 0 to year 15, fluctuations in BMI during year 0 to year 15, and covariates measured at year 15. Covariates for model 1 were age, sex, race, study center, cigarette smoking, and physical activity. Covariates for model 2 were covariates for model 1 plus systolic blood pressure, HDL cholesterol, LDL cholesterol, triglycerides, and fasting glucose.